

## **ABSTRACT**

[0024] An apparatus and method is disclosed for modeling an electric submersible pump using a neural network, data from a deterministic model, and, optionally, data obtained from a real world electric submersible pump. It is emphasized that this abstract is provided to comply with the rules requiring an abstract which will allow a searcher or other reader to quickly ascertain the subject matter of the technical disclosure. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims.